CLAIMS

What is claimed is:

- 1. A linear guide for transmitting a torque between a tubular housing, which is defined by a longitudinal axis and rotatable about the longitudinal axis, and a shaft, which is received in the housing and movable in the direction of the axis in relation to the housing, said linear guide comprising plural axial rolling bearings received in the housing in surrounding relationship to the shaft, wherein the plural axial rolling bearings are disposed in two radial planes in axial spaced-apart relationship, wherein the axial rolling bearings in each of the two radial planes have each two bearing members and a set of rolling bodies disposed between the bearing members, wherein one bearing member is constructed as bushing which is retained in the housing and defines a center axis which is shifted in parallel relationship at an offset to a normal upon a longitudinal shaft axis, wherein the other bearing member has a cup-shaped configuration to define a convex surface for support by a surface area of the shaft.
- 2. The linear guide of claim 1, wherein the bushing of the axial rolling bearing is press-fitted in a continuous radial bore of the housing.

- 3. The linear guide of claim 1, wherein the shaft is a steering-column spindle having a polygonal configuration, with the surface area having a concave shape, wherein at least two longitudinal sides adjoining one another in circumferential direction have each a said concave surface area.
- 4. The linear guide of claim 3, wherein the polygonal configuration is selected from the group consisting of triangular configuration, tetragonal configuration, and square configuration.
- 5. The linear guide of claim 3, wherein the shaft is hollow or solid.
- 6. The linear guide of claim 1, wherein the axial rolling bearing is a ball bearing.
- 7. The linear guide of claim 1, and further comprising a bearing disk received in the axial rolling bearing for providing a raceway for the rolling bodies, and a spring element for support of the bearing disk.
- 8. The linear guide of claim 7, wherein the spring element is a rubber ring.

- A linear guide for transmitting a torque between a tubular housing, which is 9. defined by a longitudinal axis and rotatable about the longitudinal axis, and a shaft, which is received in the housing and movable in the direction of the axis in relation to the housing, said linear guide comprising plural radial needle bearings received in the housing in surrounding relationship to the shaft, said plural axial rolling bearings being disposed in two radial planes in axial spaced-apart relationship, wherein the radial needle bearings in each of the two radial planes have each two bearing members and a set of rolling bodies disposed between the bearing members, wherein one bearing member is constructed as needle bushing which is retained in the housing and defines a center axis which is shifted to a normal of a longitudinal shaft axis, wherein the other bearing member has a cup-shaped configuration to define a convex surface for support by a surface area of the shaft, and includes a bearing journal which is surrounded by the needle bushing, with the rolling bodies arranged in the needle bushing and constructed as needles.
- 10. The linear guide of claim 9, wherein the center axis of the needle bushing is shifted in parallel relationship to the normal at an offset.
- 11. The linear guide of claim 9, wherein the center axis of the needle bushing is inclined at an angle in relation to the normal.

- 12. The linear guide of claim 9, wherein the needle bushing of the needle bearing is press-fitted in a continuous radial bore of the housing.
- 13. The linear guide of claim 8, wherein the shaft is a steering-column spindle having a polygonal configuration, with the surface area having a concave shape, wherein at least two longitudinal sides adjoining one another in circumferential direction have each a said concave surface area.
- 14. The linear guide of claim 13, wherein the polygonal configuration is selected from the group consisting of triangular configuration, tetragonal configuration, and square configuration.
- 15. The linear guide of claim 13, wherein the shaft is hollow or solid.
- 16. The linear guide of claim 9, wherein the needle bushing has a bottom formed with an inwardly directed convexly arched elevation for support of an outer end surface of the bearing journal.
- 17. The linear guide of claim 9, wherein the needle bushing has a bottom, and further comprising an axial rolling bearing having a set of rolling bodies disposed between the bottom of the needle bushing and an outer end surface of the bearing journal.

- 18. A linear guide, comprising:
 - a tubular housing defining a longitudinal axis;
 - a shaft received in the housing and movable in direction of the axis in relation to the housing; and

plural bearings received in the housing in surrounding relationship to the shaft, said plural bearings being disposed in two radial planes in axial spaced-apart relationship, wherein the bearings in each of the two radial planes have each two bearing members and a set of rolling bodies disposed between the bearing members, wherein one bearing member is constructed as bushing which is mounted in the housing and defines a center axis which is oriented out-of-alignment with a normal with respect to the longitudinal axis of the shaft, wherein the other bearing member has a cup-shaped configuration to define a convex surface for support by a cup-shaped surface area of the shaft.

- 19. The linear guide of claim 18, wherein the center axis of the bushing is shifted in parallel relationship to the normal at an offset.
- 20. The linear guide of claim 18, wherein the center axis of the bushing is inclined at an angle in relation to the normal.

- 21. The linear guide of claim 18, wherein the plural bearings are each implemented as an axial rolling bearing, with the set of rolling bodies being formed as balls disposed axially between the bearing members.
- 22. The linear guide of claim 18, wherein the plural bearings are each implemented as radial needle bearing, with the set of rolling bodies being formed as needles disposed radially between the bearing members.
- 23. The linear guide of claim 18, wherein the plural bearings are each implemented as a combination of axial rolling bearing, with the set of rolling bodies being formed as balls disposed axially between the bearing members, and a radial needle bearing, with the set of rolling bodies being formed as needles disposed radially between the bearing members.
- 24. The linear guide of claim 23, wherein the other bearing member has a T-shaped configuration with a bearing journal and a running disk, which is disposed immediately adjacent the shaft and has the convex surface, said balls and said needles being positioned between the one bearing member and the bearing journal.